Status of MxCuBE Beamline Control at BESSY II

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on behalf of the HZB MX group

MXCuBE Meeting, 30. Nov - 2.Dec. 2015,
ALBA Synchrotron

Status of MX Beamlines at HZB

- Currently long shutdown from 26. October - 3. January
- All work focused on Beamline 14.2
- Beamline 14.2 "Go-life" planned after shutdown

MxCubeV2 at Beamline 14.1

One week of intense work together with Vicente from 8. - 12. June

Solved / improved:

- communication issue between MD2 and Hardware Object
- handling of MD2 motors and sample centering
- chained load for sample changer
- automatic display/refresh of sample list (Tree Brick)

MxCubeV2 at Beamline 14.1 current status

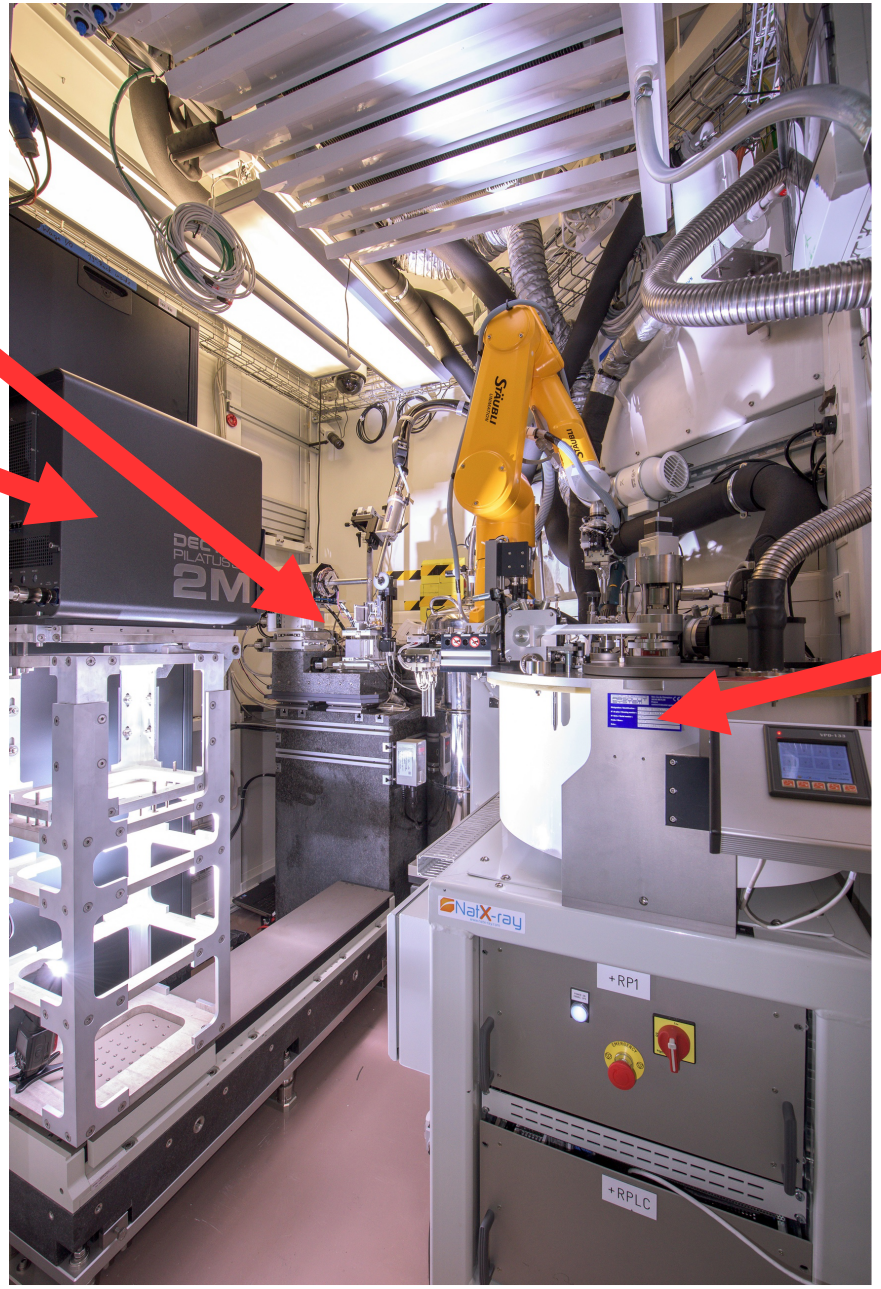
- changed OS from Scientific Linux to Debian 7
- issues in signal interaction
- still not yet in user operation

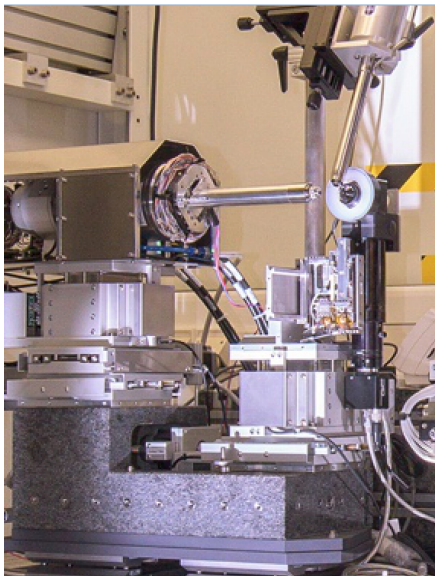
Major problem:

Booking situation on BL 14.1 due to BL 14.2 upgrade

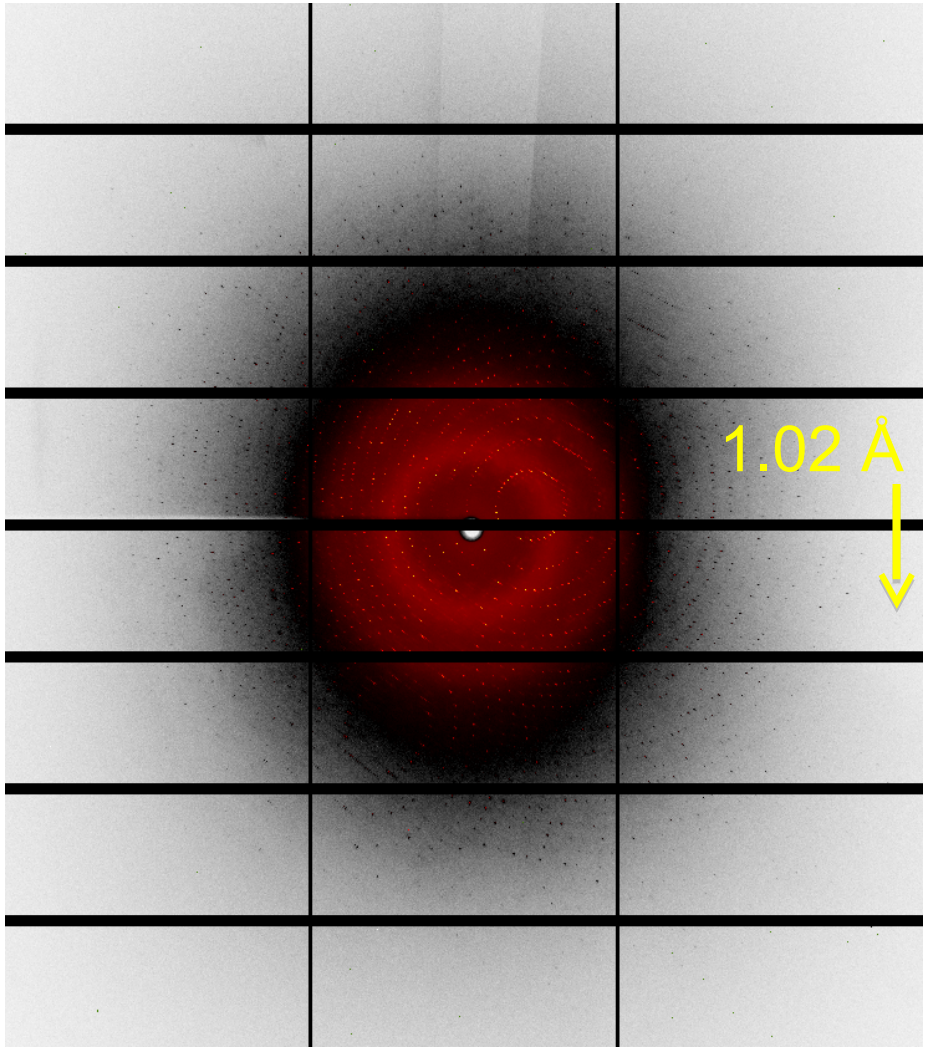
No shifts for development

Beamline 14.2 upgrade

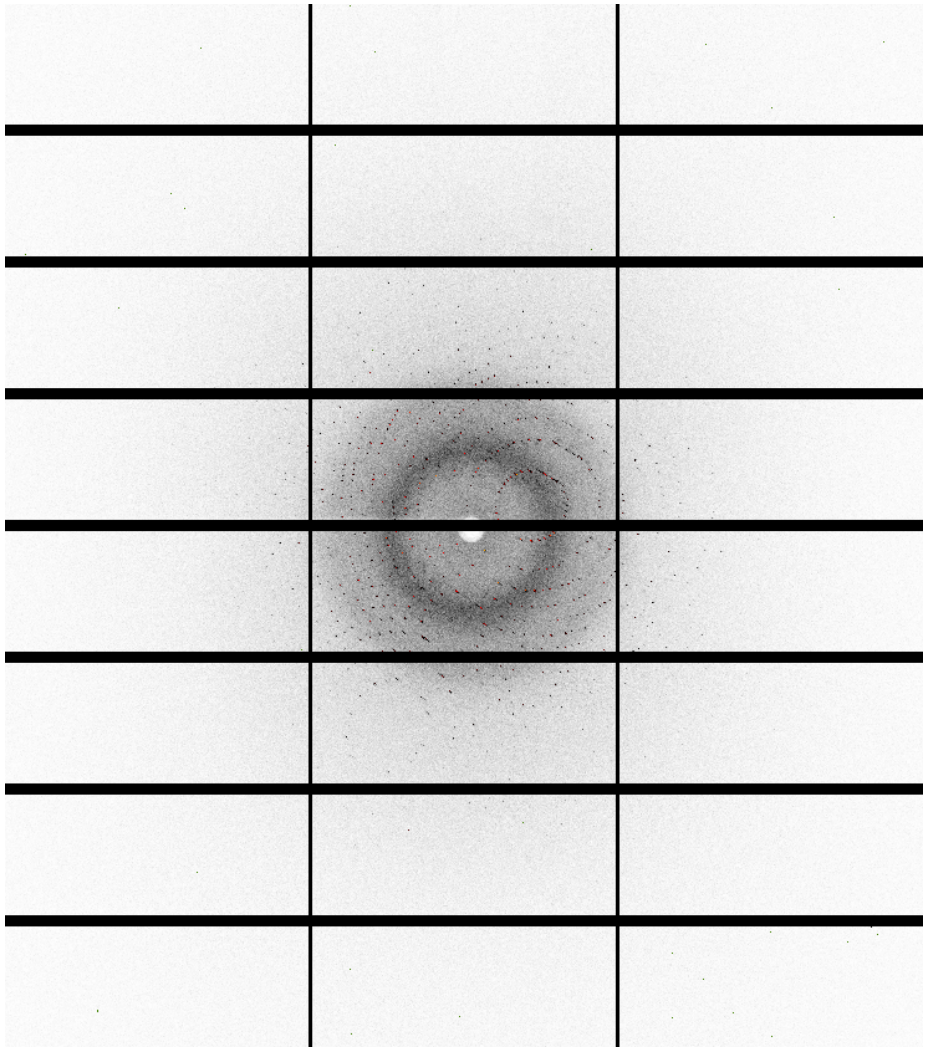




First light at BL 14.2, 2015-10-23



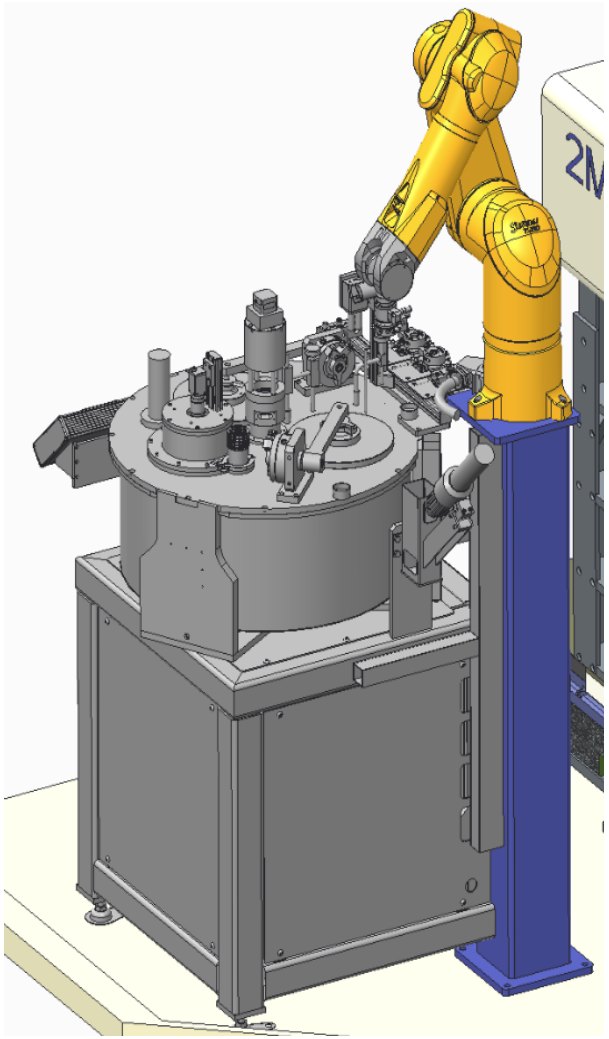
Pilatus3 2M, 1000 micron sensor thickness
Thaumatin still image, 5s exposure



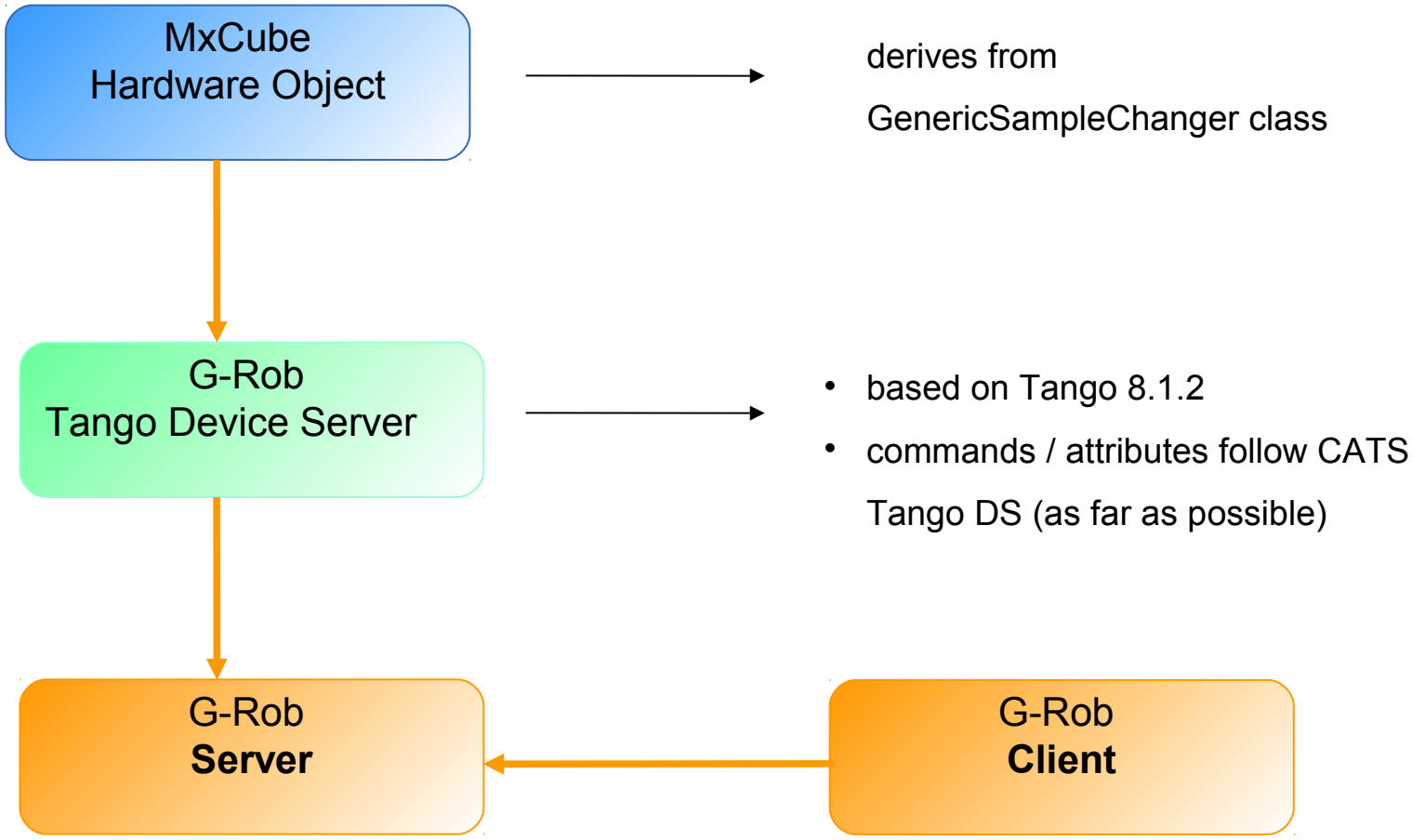
Pilatus3 2M, 1000 micron sensor thickness
Thaumatin still image, 0.1s exposure

G-Rob System by NatX-ray

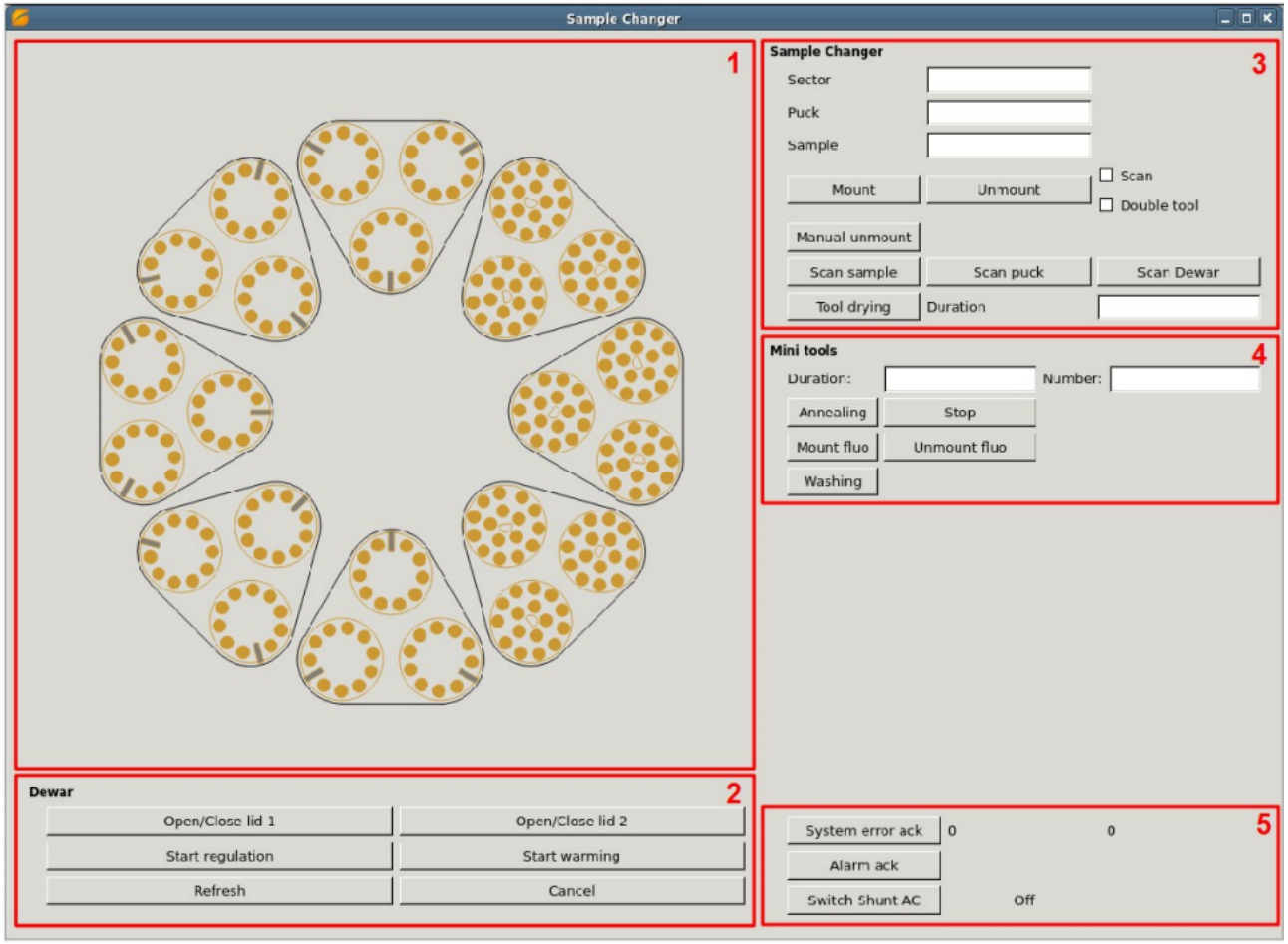
- G-Rob Server / Client
- rotating dewar (Absolute System)
- Unipuck and SPINE
- Gripper:
  - ➔ SPINE
  - ➔ single Unipuck
  - ➔ double Unipuck
- Tango DS
- MxCube HWO



G-Rob System, Tango DS and Hardware Object



G-Rob client interface



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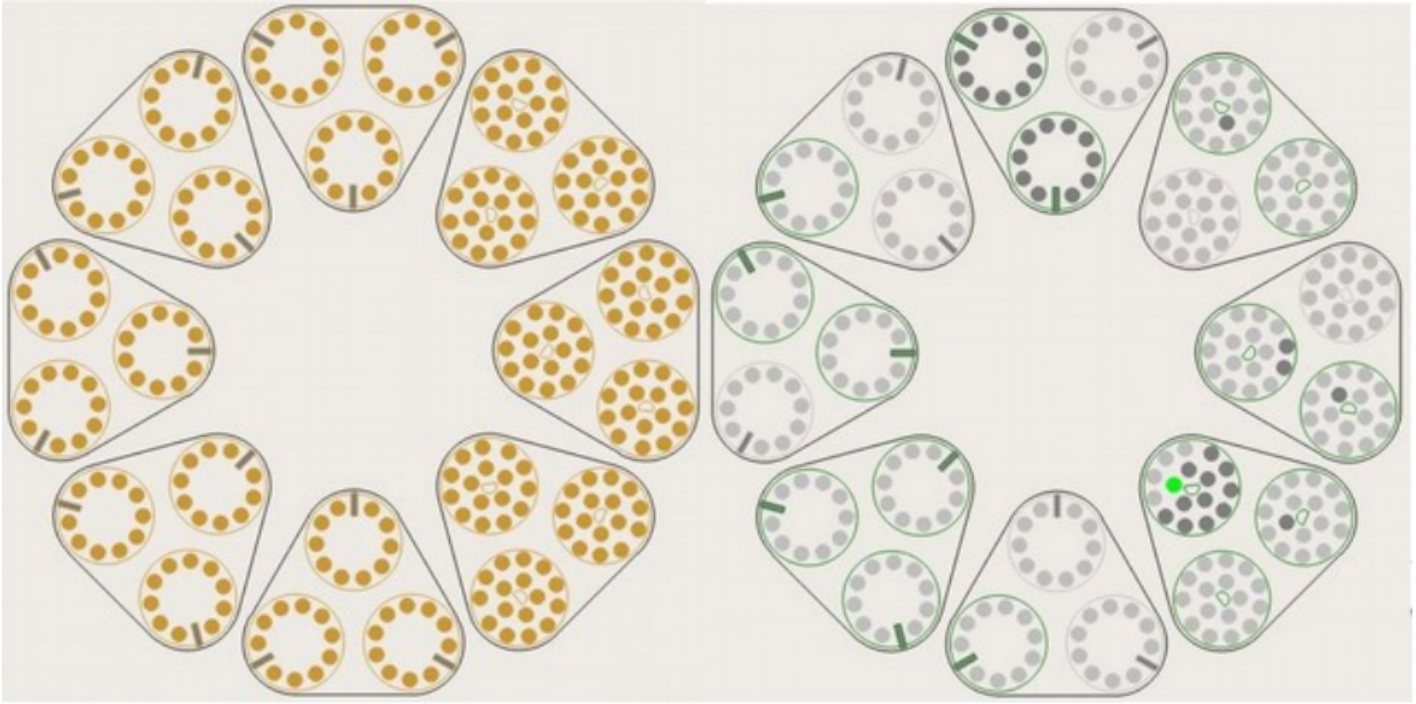

MxCube - next steps planned at BESSY II

- MxCubeV2 at Beamline 14.1 in user operation
- Integration of Nanodiff components as Hardware Objects
- MxCubeV2 at Beamline 14.2 in user operation
- Test MxCubeV2 with Qt4